# The Manitoba Legacy

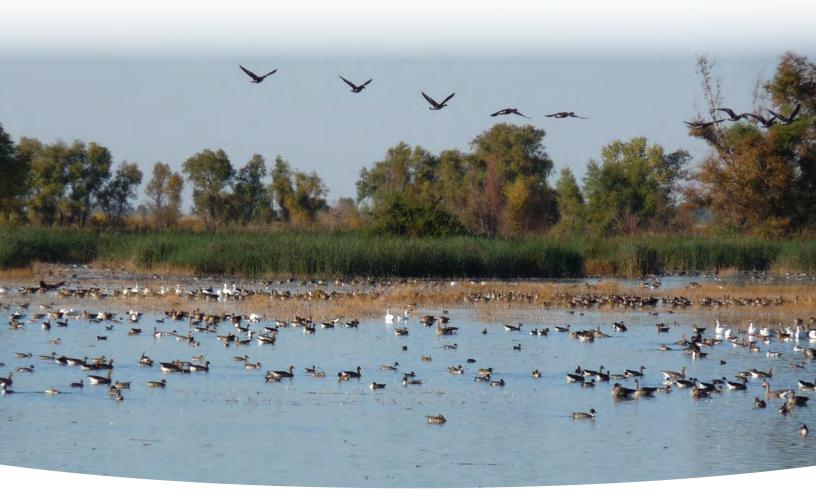
## **Conserving Manitoba's Critical Waterfowl Habitat**

Reporting Period:

April 2011 to March 2012

Submitted by Ducks Unlimited Canada and Ducks Unlimited Inc.
To
Wisconsin Department of Natural Resources

July 2012









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Ducks Unlimited (DU) is the world leader in wetland conservation. Since 1938, DU has invested over one billion dollars in waterfowl and wildlife habitat conservation in the United States, Canada and Mexico. In Canada alone, DU has completed over 8,880 habitat projects, securing 6.2 million acres and positively influencing over 95 million acres of habitat that benefit waterfowl, wildlife and people. Besides waterfowl, numerous species of wildlife, including many threatened or endangered species, live and flourish on DU projects.

The Wisconsin Department of Natural Resources (WDNR) has contributed to waterfowl conservation on the Canadian Prairies since 1968. This partnership with DU recognizes the importance of Canadian waterfowl production to the Wisconsin hunter. Over the past 44 years, WDNR has contributed in excess of \$4.9M to this effort.

Ducks Unlimited Canada (DUC) is a proud partner of the North American Waterfowl Management Plan (NAWMP). The Prairie Habitat Joint Venture (PHJV), a partnership led by federal and provincial governments, DUC, Nature Conservancy of Canada and Wildlife Habitat Canada, has collaborated on waterfowl conservation under NAWMP in Prairie Canada since 1986. DUC leads the delivery of conservation programs and science to support NAWMP goals on the Canadian Prairies. The success of DUC's programs in Manitoba, particularly in the prairie pothole-laden target areas, will be critical to support the NAWMP goal of achieving sustainable waterfowl production at the 1970s level. The PHJV goal is to protect, restore and enhance an additional 15 million acres over the next 25 years.

DUC uses the best scientific research available to direct, evaluate and modify DUC's conservation programs and practices so that DUC can most effectively meet the conservation needs of waterfowl in the Prairie Pothole Region (PPR). This union of science and conservation sets DUC apart from other non-government conservation organizations in Canada.

In March 2011, Ducks Unlimited presented a funding proposal and application to the WDNR in response to the critical waterfowl needs of the PPR of Manitoba. The WDNR approved funding for FY 12 in the amount of \$173,501 to support work on these breeding grounds towards DUC's conservation efforts. This final report is for FY 2012 that identified WDNR funding would be matched by DU and this combined total matched by the North America Wetlands Conservation Act (NAWCA), and other partners to realize \$2,134,004 in support of conservation efforts in the priority areas and surrounding prairies and parklands of Manitoba. This funding will contribute significantly to the goals of the Prairie Habitat Joint Venture; however still falls short of enabling DUC and our partners to fully deliver on the science-based needs for the Manitoba PPR.

This report highlights DUC's habitat accomplishments within Manitoba (Minnedosa and Killarney priority areas and surrounding Manitoba PPR) during the period of April 1, 2011 to March 31, 2012.

## Conserving the Manitoba Landscape

#### **Manitoba Priority Areas**

The highest densities of breeding ducks in North America occur in the Prairie Pothole Region (PPR) of Canada. Located within the PPR are the Prairie and Aspen Parkland Eco-regions of Manitoba, which are composed of a diversity of wetland and upland habitats. These habitat characteristics make this area key to waterfowl production and provide a basis to strategically deliver conservation programs. The PPR of Manitoba is an important source area for waterfowl migrating to Wisconsin. As a result, this has been selected as the delivery area of focus for Wisconsin funding with efforts focused particularly in the Minnedosa and Killarney priority areas (Figure 1).

Based on the U.S. Fish and Wildlife Service survey data, the Manitoba PPR and the priority areas in particular stand out as the 'best of the best' breeding habitat in North America. However, the values of these habitats have been degraded.

#### **Habitat and Funding Needs**

The Manitoba PPR as part of the PHJV program delivery area holds the highest wetland densities and thus supports the highest waterfowl densities in North America. If the NAWMP is to be successful, waterfowl conservation must be successful in the PHJV and the province of Manitoba. Currently under average wetland conditions the PHJV attracts 3.5 M breeding ducks (5 species), a decline of nearly 700,000 ducks over the last 30 years as a result of continued habitat loss and degradation. The current habitat objectives for Manitoba are to restore 715,000 acres of lost wetland and upland habitats and protect 1.7 M acres of existing critical waterfowl habitat. The total cost of this work is estimated at \$200 M or \$8 M per year over the next 25 years. Current funding levels for habitat conservation in Manitoba are \$4 M per year and declining, which is only 50% of the funding needs to meet the goals of the PHJV and the NAWMP. Increased financial support is critical to our success.

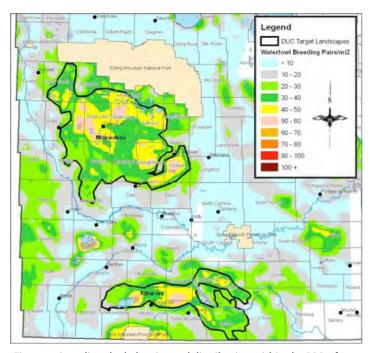


Figure 1. Breeding duck density and distribution within the PPR of Manitoba. Yellow and red areas represent the highest duck densities in the province. This map is based on over 50 years of U.S. Fish and Wildlife Service survey data and represents average waterfowl distribution over the long term.

### Conserving the Manitoba Landscape

#### **DUC'S SCIENCE SUPPORTS WDNR INVESTMENT**

Ducks Unlimited Canada has led the last 20 years of research in the Canadian PPR investigating waterfowl breeding success as related to habitat conditions on the prairies. Scientists nest searched over 350,000 acres of habitat, radio tracked 3920 mallard hens and located and determined nest fate on over 10,000 nests. The results of this research have greatly increased our understanding of nesting duck habitat selection and success. These data support DUC's efforts to develop strategic waterfowl habitat recovery plans that are implemented and evaluated using a Waterfowl Productivity Model that relates duck production to habitat condition.

Based on the Waterfowl Productivity Model, DUC has defined waterfowl needs for all landscapes in the Canadian Prairies and, specifically, habitat

actions needed to restore duck populations within the critical Manitoba landscapes. These needs are represented in the habitat objectives set out in the PHJV Implementation Plan. Our 2012 Manitoba Legacy proposal defined a partnership opportunity for WDNR to support conservation in these landscapes to sustain waterfowl populations that are vital to the Wisconsin hunter.

#### WISCONSIN'S DUCKS NEED MANITOBA

Historical waterfowl band recovery data have established a clear link between waterfowl produced and banded in Manitoba and recovered in the Mississippi Flyway. These data further support that Manitoba and the priority areas targeted by this project stand out as an important source area for ducks harvested in Wisconsin (Figure 2).



Figure 2. Origin of ducks harvested in Wisconsin from 1986-2005 Note that this data is not corrected for banding effort.



Based upon DUC's waterfowl science and assessment of the effectiveness of our conservation programs, DUC has adapted a suite of conservation initiatives to maximize waterfowl benefits. In the 2012 Manitoba Legacy Conservation Plan, DUC delivered against specific objectives for these habitat initiatives in Manitoba. See Table 2 for specific accomplishments.

#### HOW YOUR INVESTMENT WAS USED

#### **Habitat Retention**

Drainage of wetlands and breaking of native grass uplands continue to be the most significant threats negatively impacting waterfowl. DUC uses a variety of program tools to protect these remaining critical habitats that are vital to the long-term productivity of the Manitoba landscape.

- Conservation Easements and Agreements protect habitats on private lands through programs offering financial incentives for varying levels of protection. All conservation easements are perpetual and are mostly done in partnership with provincial and federal government agencies. Conservation agreements are all a minimum of 10 years and many were secured for less than a \$25 per acre investment by DU.
- 2 Land purchase program is the most intensive program that DU delivers and is a very important tool to protect high risk, high valued habitats. The cost of purchasing land continues to rise so DU invests strategically to ensure the greatest waterfowl benefits are achieved.
- Rangeland stewardship programs are designed to positively impact the majority of existing grasslands in the priority areas under the control of private ranches. To protect these lands from loss, unique partnerships with ranchers were employed. Conservation agreements addressing the protection of existing native prairie habitats while offering incentives for environmentally sound improvements were a main focus.
- Wetland Rebuilds are a re-investment into existing wetland projects that have been evaluated as highly productive and successful for waterfowl. These projects have met and surpassed their original design and agreement terms and required new infrastructure and agreements to ensure their productive capacity for another 30 years. DU will reenroll all of the landowners on the project and construct the required infrastructure improvements to maximize wetland productivity, management and waterfowl benefits.

#### **Wetland Restoration**

Most wetland restoration work has to occur on private lands. More than 70 years of program delivery has taught us that it takes a combination of intensive and extensive programs to successfully work with producers. DUC is currently using other programs such as land purchase to initiate efforts to restore wetlands. Goals for wetland restoration were conservative this year due to reduced opportunity as a result of extremely wet landscape conditions. However, DUC will continue to pursue wetland restoration opportunities that come available during the next year.

#### **Upland Restoration**

Duck nest success is a major influential factor for continental waterfowl populations. Improving nest success in the priority areas and surrounding PPR will require the restoration or enhancement of grass to provide secure nesting habitat. DUC focused significant efforts on restoring perennial cover in the priority areas through two primary efforts:

- **Forage conversion** programs provided incentives to landowners to convert cultivated land to perennial cover to provide waterfowl nesting benefits and support the beef industry. For the waterfowl the increase in forage provides more nesting choices with better protection from predators.
- Winter wheat programs focused on the agronomic and economic benefits of the crop to the producer. Approaches vary from supporting research to developing new varieties that are more successful in the Canadian prairies, to working more directly with the producers through incentive or extension programs. DUC's research has confirmed that there are 24 times more ducks hatched in winter wheat compared to spring wheat on a per acre basis because both nest success and density increase. This is particularly beneficial to early nesting duck species like mallards and northern pintails.

#### Habitat Asset Management

The successful delivery of conservation programs has been occurring over the past 75 years of DU's existence. This represents a substantial investment by DU and many other partners to place a valuable network of habitat projects across Manitoba and the rest of the breeding grounds. In order to ensure these projects return the maximum benefit to waterfowl, an annual investment of resources is required. Our Habitat Asset Management efforts this year have sustained the productivity of 305,021 acres of waterfowl habitat across Manitoba.



The Wisconsin Department of Natural Resources FY 2012 contribution was \$173,501 toward the priority areas in the Manitoba PPR.WDNR's contribution was pooled with funds from other partners and matched by Ducks Unlimited. That combined amount, in turn, was then matched by NAWCA funds to realize funds totaling \$2,134,004.

Table 1. Funding Received and expended for FY 12.

Partners	Total Contribution		
Wisconsin	\$173,501		
Florida	\$35,000		
Missouri	\$275,000		
Kentucky	\$50,000		
DU	\$533,501		
NAWCA	\$1,067,002		
Total	*\$2,134,004		

<sup>\*</sup>Ducks Unlimited will match WDNR's contribution, and then this combined total is matched with federal funds under the North American Wetlands Conservation Act.



Table 2. Manitoba Legacy Program Goals, Accomplishments and Costs based on funding received

Conservation Programs	Program Goals (acres)	Accomplishments (acres)	Program Costs (\$)
1. Habitat Restoration	1500	4517	\$973,638
2. Wetland Restoration	900	304	\$331,858
3. Upland Restoration	15,000	7517	\$195,479
4. *Habitat Asset Management	550,000	305,021	\$633,029
Totals	17,400	12,338¹	2,134,004

<sup>\*</sup> Habitat Asset Management acres are not incremental and are therefore not included in the total acre goals.

<sup>&</sup>lt;sup>1</sup> The reduced acre accomplishments were driven primarily by dramatically increased land values over the past year which substantially increased the price per acre of land purchase and conservation easements. The secondary factor was driven by the extremely wet landscape conditions which reduced accomplishments in both the forage and wetland restoration programs.

## Securing the Legacy

The PHJV Implementation Plan and Ducks Unlimited have set habitat objectives to fully recover the Canadian Prairies and to sustain waterfowl production equivalent to the levels of the 1970s. Continued partnerships will be the key to success. DUC values its relationship with WDNR and recognizes them as a key player in supporting NAWMP conservation efforts in Canada. However, we will need increased support from all partners if the ambitious goals of NAWMP are to be met.

The waterfowl community continues to recognize habitat programs as the primary solution to waterfowl recovery. Ducks Unlimited

Canada is the primary delivery agent of the NAWMP program in the PPR of Canada.

Continued action on the Canadian Prairies means that critical waterfowl habitat will be protected in the top waterfowl production area of North America. Your critical support is needed now as every year the cost of habitat conservation rises making it more difficult to achieve the goals of the NAWMP.

Table 3. Manitoba PPR Priority Area Accomplishments FY 2012

Conservation Initiatives/Programs	Direct Programs (Acres) <sup>1</sup>	Extension Programs (Acres) <sup>2</sup>	FY12 Total (Acres)	FY12 Costs (\$'s)
Habitat Retention				
Conservation Easements	1878	-	1878	434,393
Land Purchase	728	-	728	417,191
Rangeland Stewardship	-	8419	8419	82,682
Conservation Agreements	1911	-	1911	39,372
Sub-total	4517	8419	12,936	973,638
Wetland Restoration	304	-	304	331,858
Upland Restoration				
Conservation Forages	577	-	577	50,359
Winter Wheat	6940	520,960	527,900	145,120
Sub-total	7517	520,960	528,477	195,479
Total Acres	12,338	529,379	541,717	
Habitat Management <sup>3</sup>			305,021	633,029
Total Expenditure FY12				2,134,004

Direct programs – Programs whereby DUC directly impacts actions of producers, improves, or protects habitat.

<sup>&</sup>lt;sup>2</sup> Extension programs – are programs whereby DUC extends technical advice mutually beneficial to both producers and to waterfowl habitat.

<sup>&</sup>lt;sup>3</sup> Habitat Management - These acres include the existing projects requiring annual management to maintain healthy habitats. The acres in this category are not included in the total of habitat accomplishments.